

Human mts-1 Nucleotide Sequence

ATG-GCG-TGC-CCT-CTG-GAG-AAG-GCC-CTG-GAT-GTG-ATG-GTG-TCC-ACC-
TTC-CAC-AAG-TAC-TCG-GGC-AAA-GAG-GGT-GAC-AAG-TTC-AAG-CTC-AAC-
AAG-TCA-GAG-CTA-AAG-GAG-CTG-CTG-ACC-CGG-GAG-CTG-CCC-AGC-TTC-
TTG-GGG-AAA-AGG-ACA-GAT-GAA-GCT-GCT-TTC-CAG-AAG-CTG-ATG-AGC-
AAC-TTG-GAC-AGC-AAC-AGG-GAC-AAC-GAG-GTG-GAC-TTC-CAA-GAG-TAC-
TGT-GTC-TTC-CTG-TCC-TGC-ATC-GCC-ATG-ATG-TGT-AAC-GAA-TTC-TTT-
GAA-GGC-TTC-CCA-GAT-AAG-CAG-CCC-AGG-AAG-AAA

FIG.1

Human mts-1 Amino Acid Sequence

1 14
Met-Ala-Cys-Pro-Leu-Glu-Lys-Ala-Leu-Asp-Val-Met-Val-Ser-
Thr-Phe-His-Lys-Tyr-Ser-Gly-Lys-Glu-Gly-Asp-Lys-Phe-Lys-
Leu-Asn-Lys-Ser-Glu-Leu-Lys-Glu-Leu-Leu-Thr-Arg-Glu-Leu-
Pro-Ser-Phe-Leu-Gly-Lys-Arg-Thr-Asp-Glu-Ala-Ala-Phe-Gln-
Lys-Leu-Met-Ser-Asn-Leu-Asp-Ser-Asn-Arg-Asp-Asn-Glu-Val-
Asp-Phe-Gln-Glu-Tyr-Cys-Val-Phe-Leu-Ser-Cys-Ile-Ala-Met-
Met-Cys-Asn-Glu-Phe-Phe-Glu-Gly-Phe-Pro-Asp-Lys-Gln-Pro-
Arg-Lys-Lys

FIG.2

10067642.000502

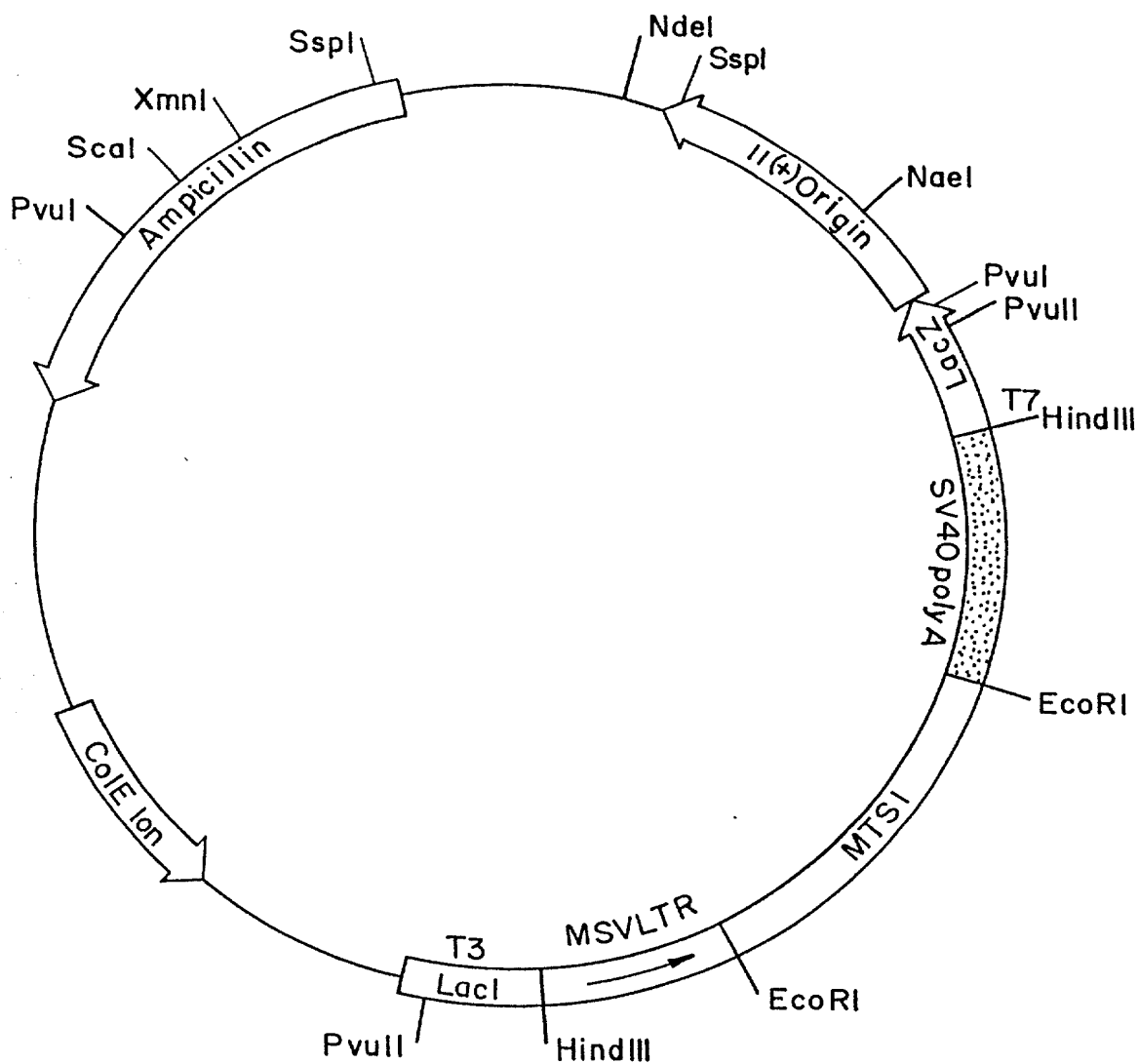


FIG.3

205020-87949001

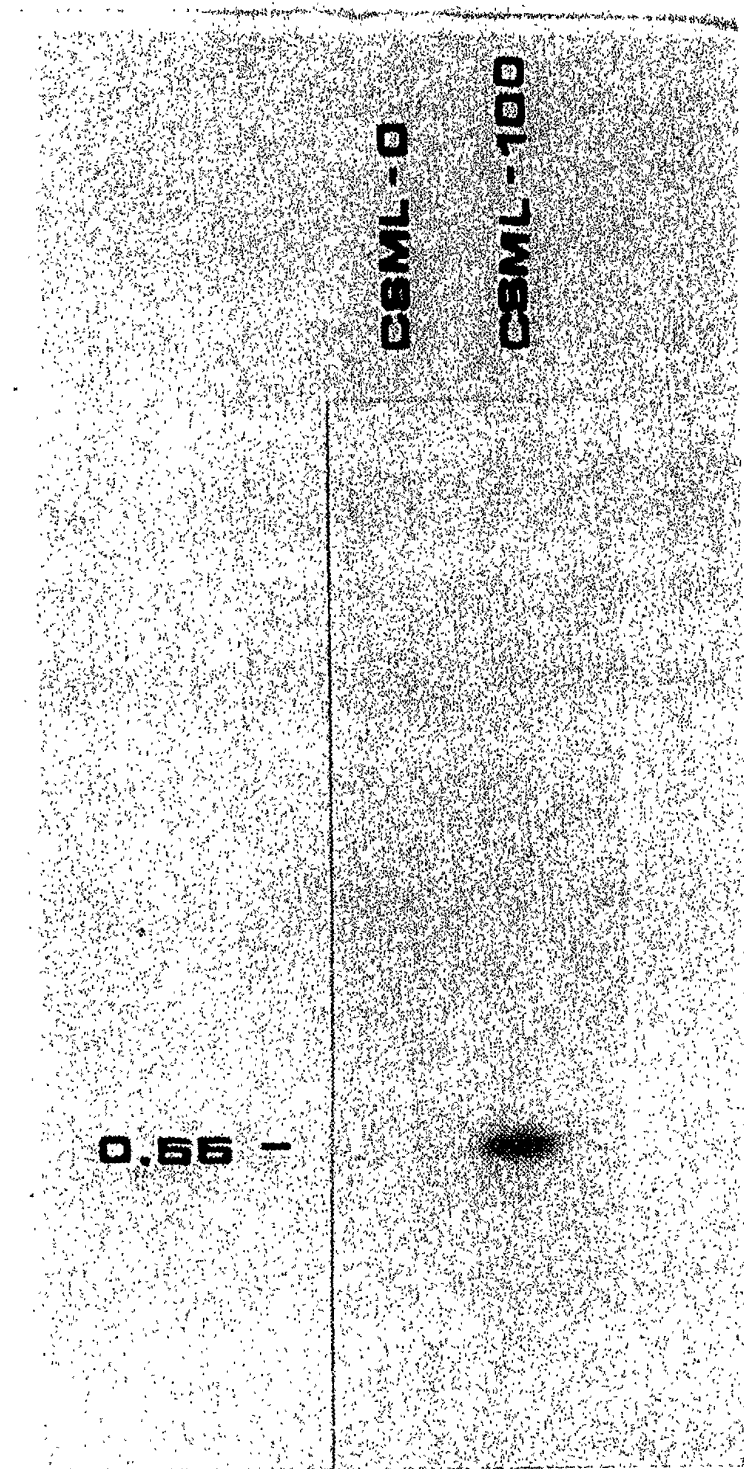


FIG.4

2005-01-27-2007

M M M M M M
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

M M
1 2 3

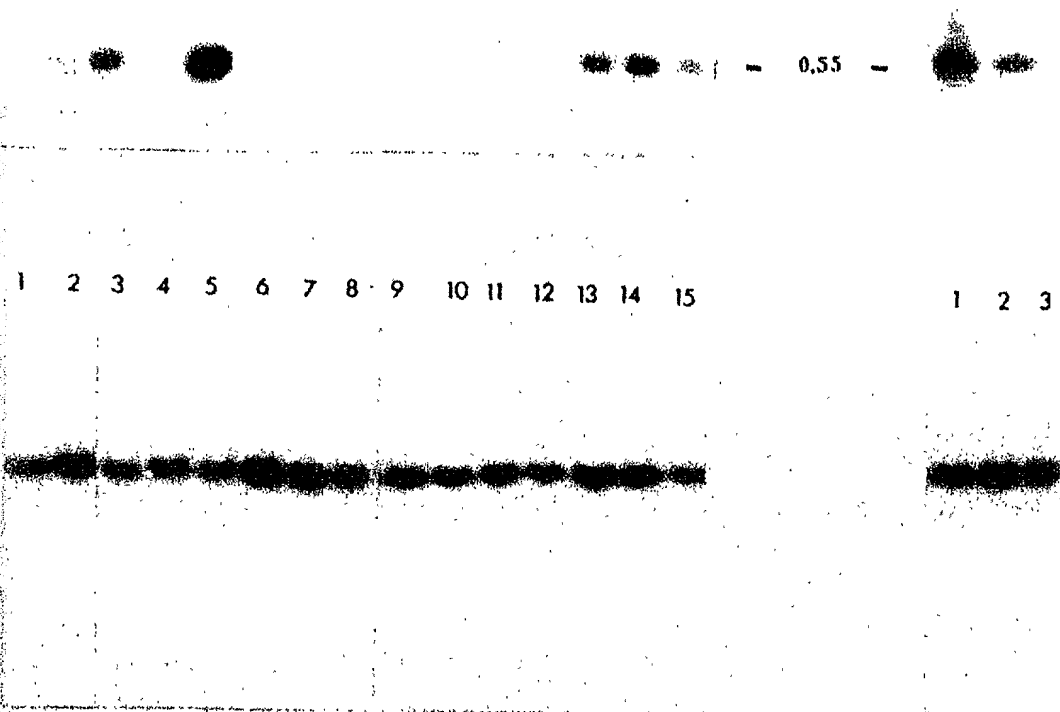


FIG.5

1057612.030502

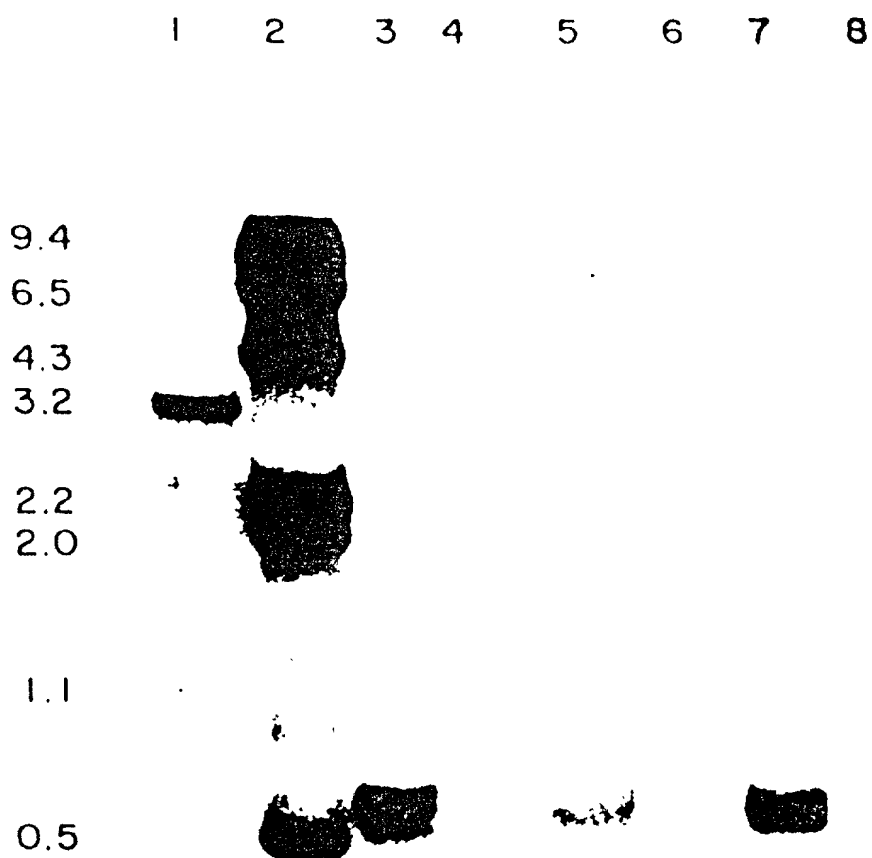


FIG. 6

Adenocarcinoma IR6

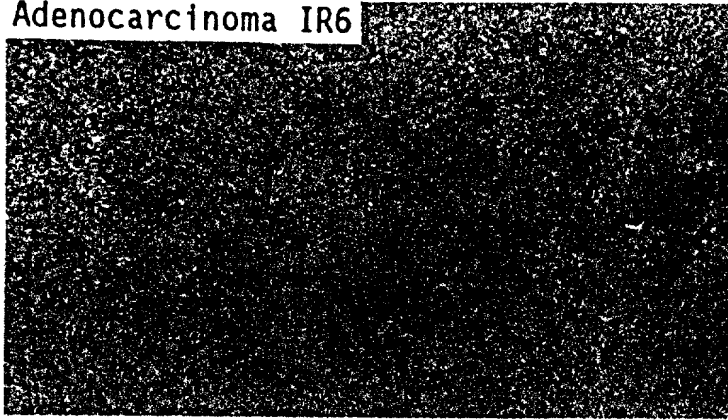


FIG. 7A

Tubercular Carcinoma IR3

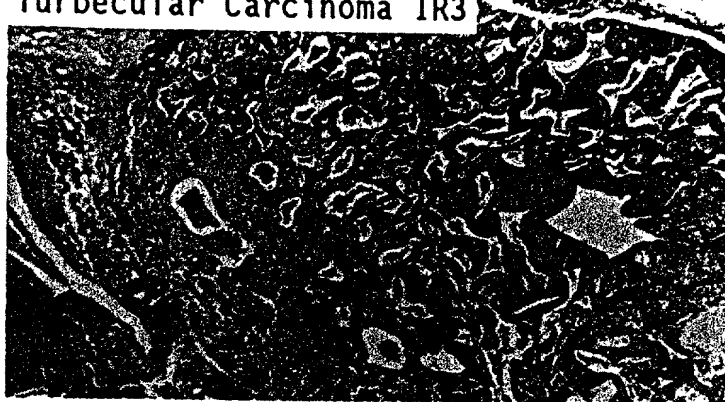


FIG. 7B

10067642-020502

Papillary Carcinoma IR2

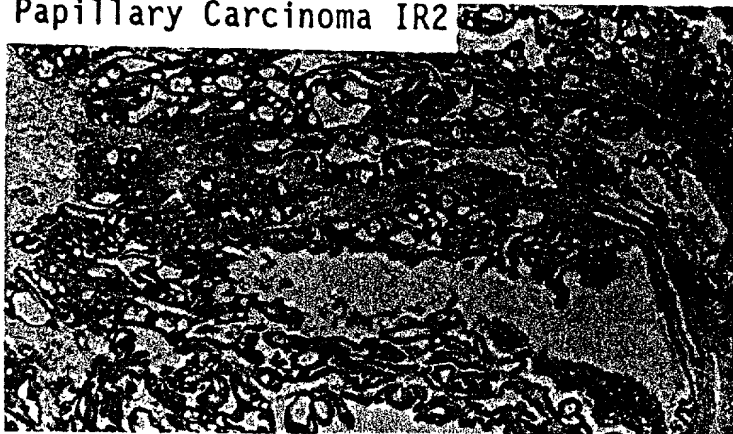
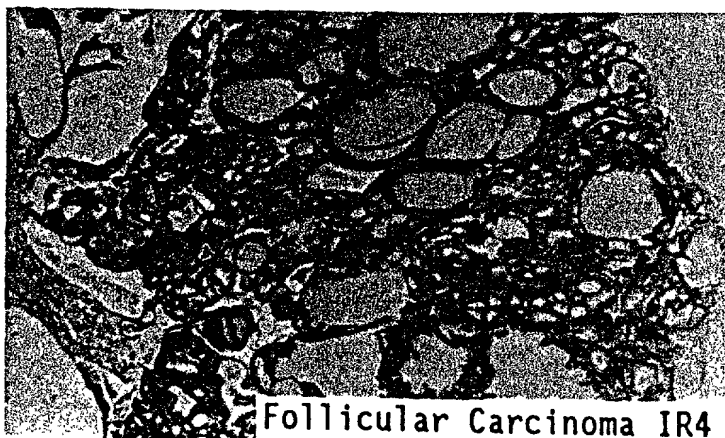


FIG. 7C



Follicular Carcinoma IR4

FIG. 7D

205020-219/5001

205020-219250T

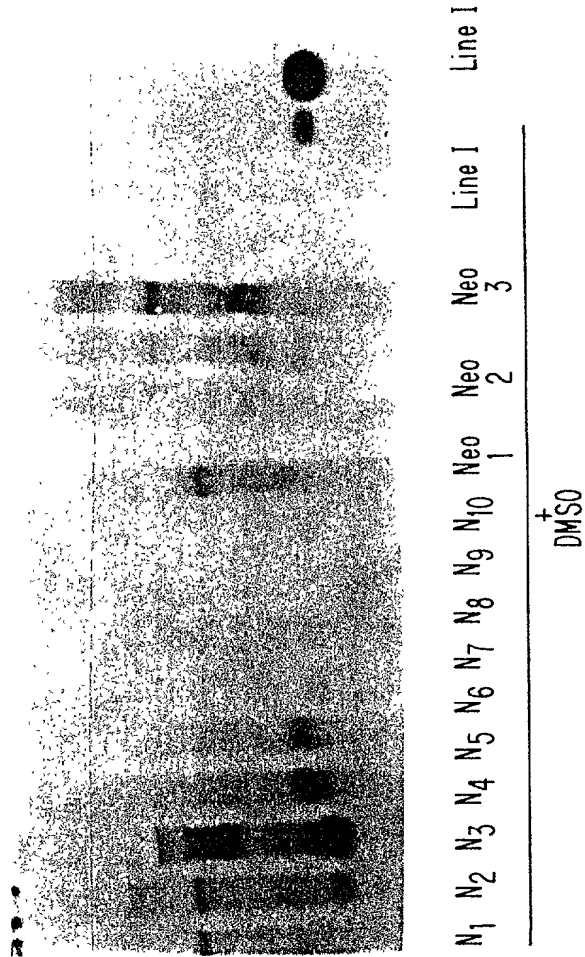


FIG. 8

10057619-020502

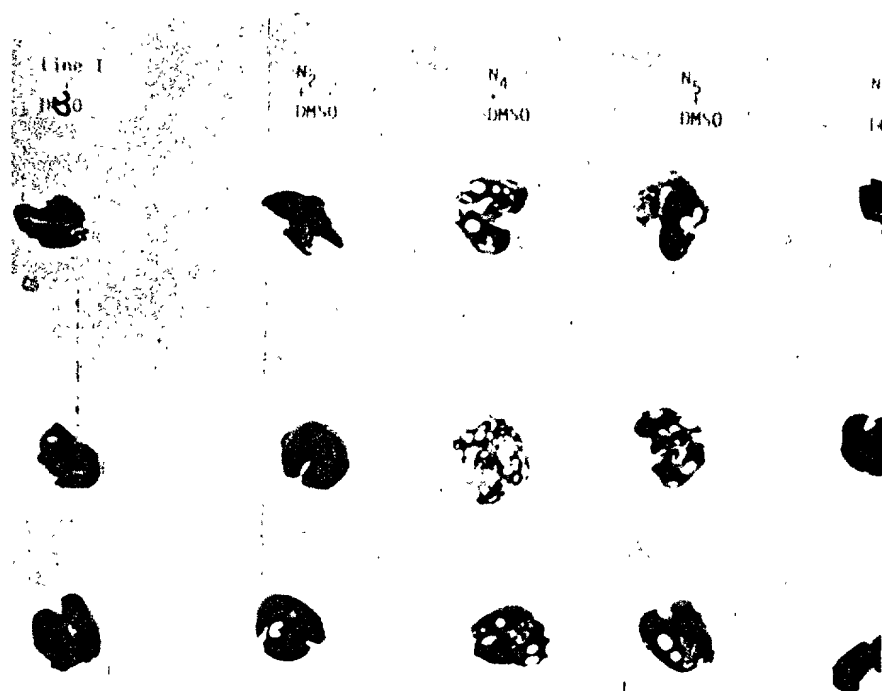
FIG. 9B

FIG. 9D

FIG. 9A

FIG. 9C

FIG. 9E



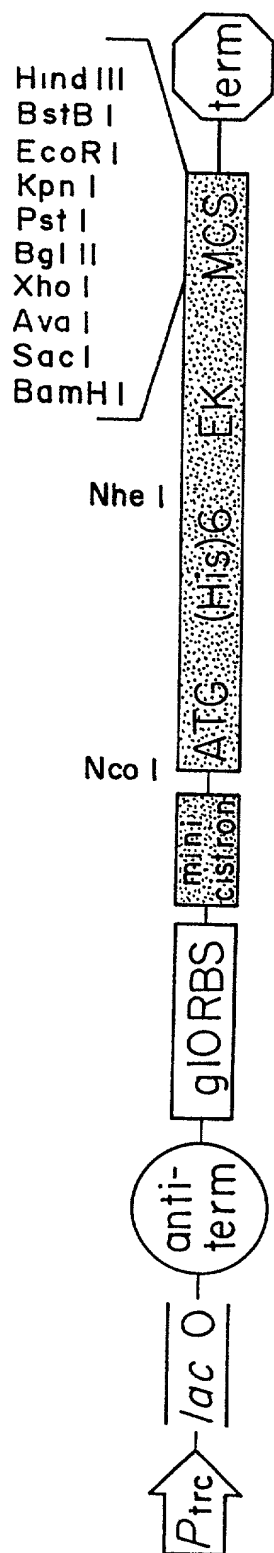


FIG. 10a

10637618.000507
205000-2152507

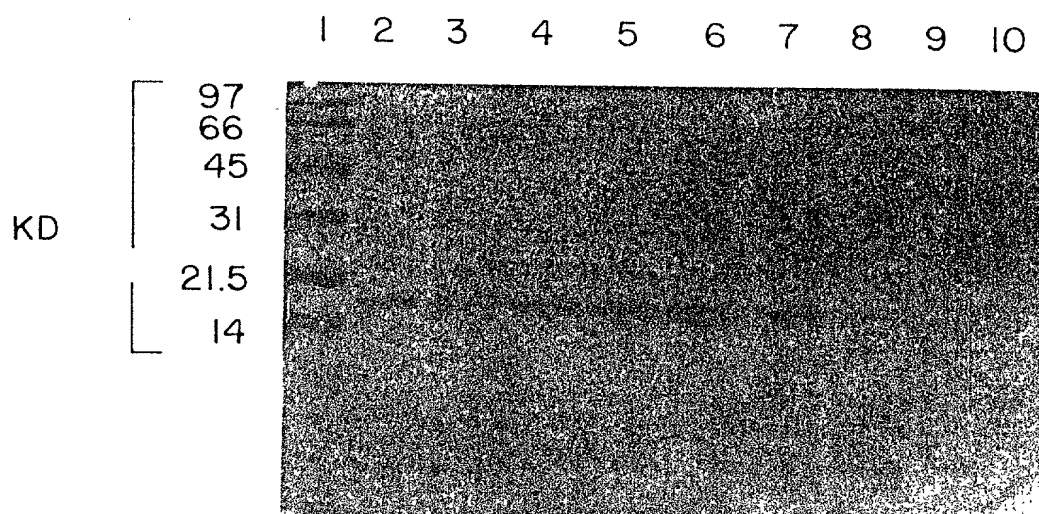


FIG. 10B

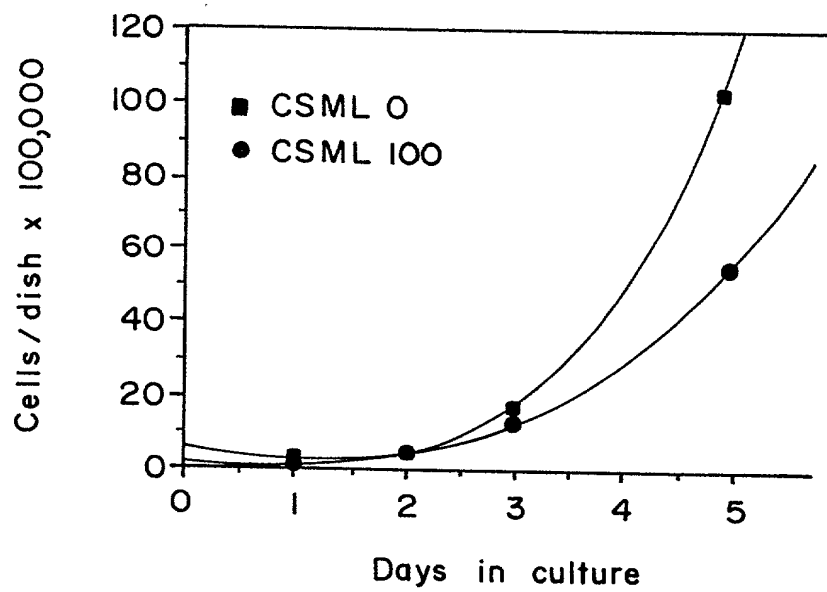


FIG. II

203020-8192001

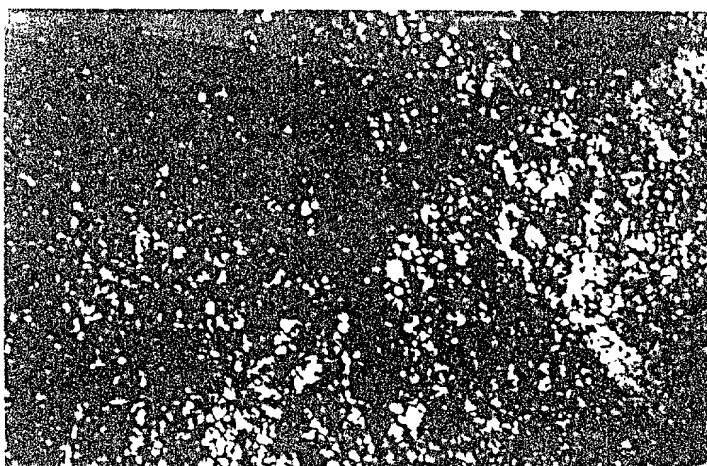


FIG. 12 A

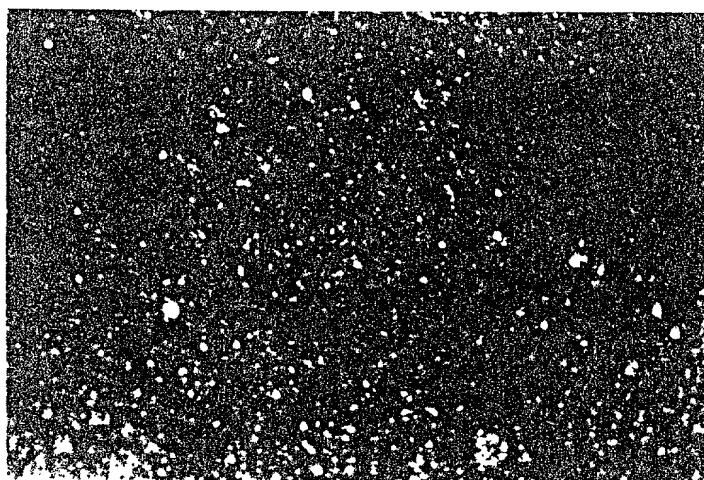


FIG. 12 B

10057619.020502

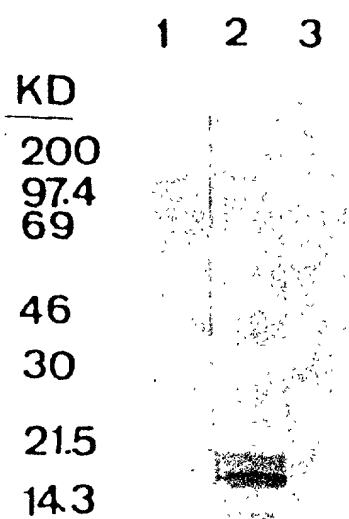


FIG. 13

1057642-020500

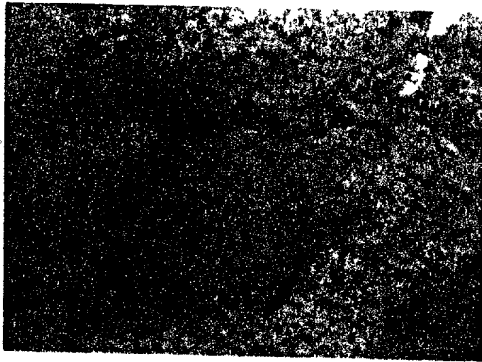


FIG. 14A

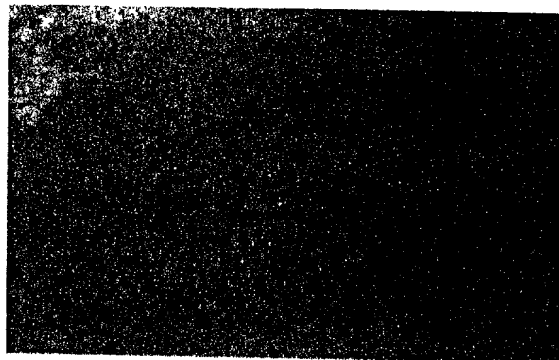


FIG. 14B

105749.0500

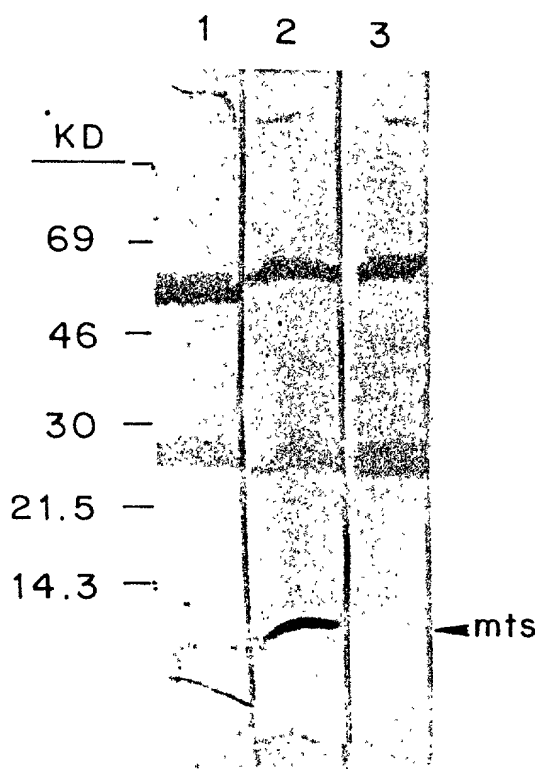


FIG. 15A

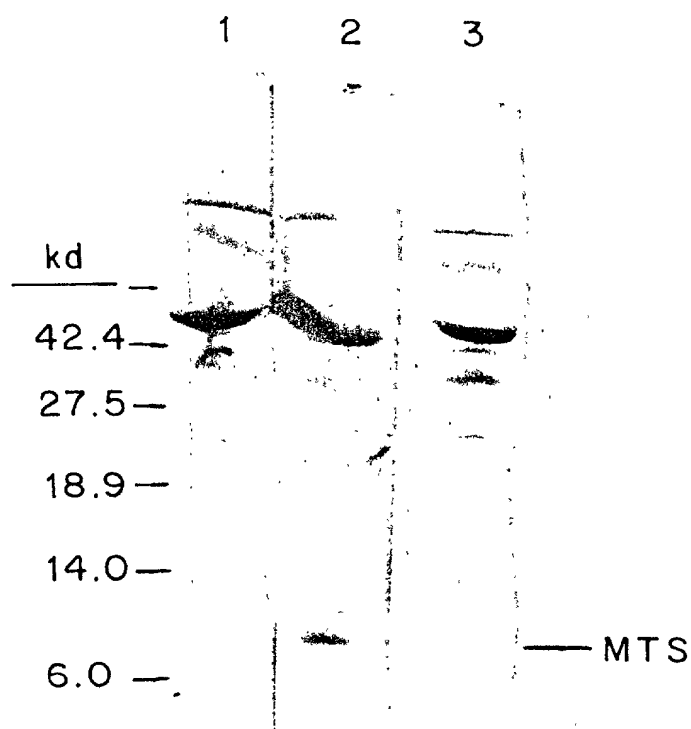


FIG. 15B

10057519.02000
205020 21505001

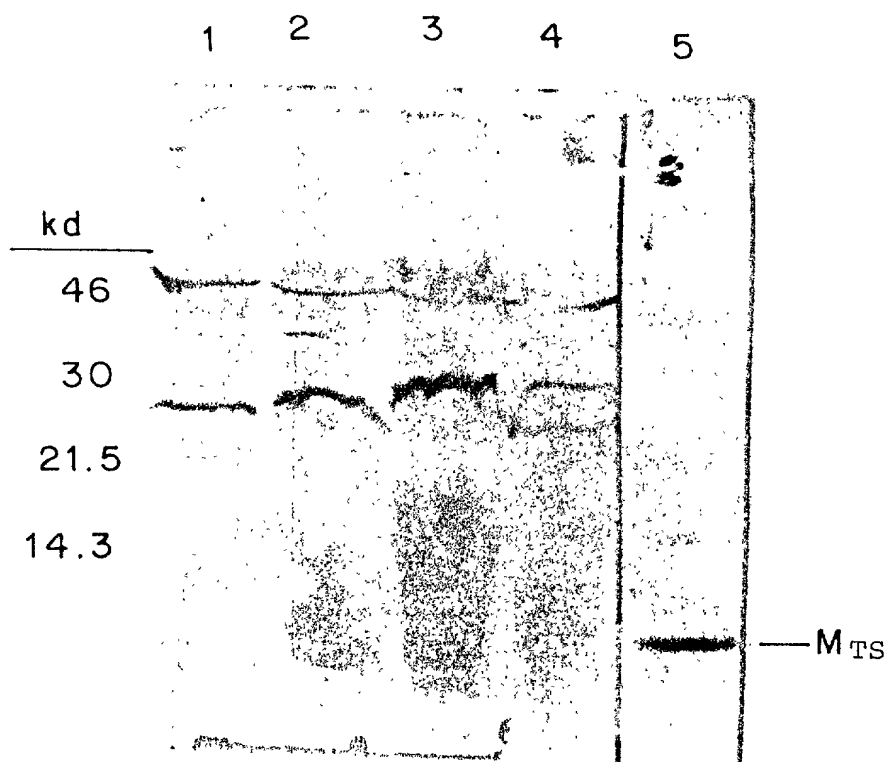


FIG. 15C

10057612.020502

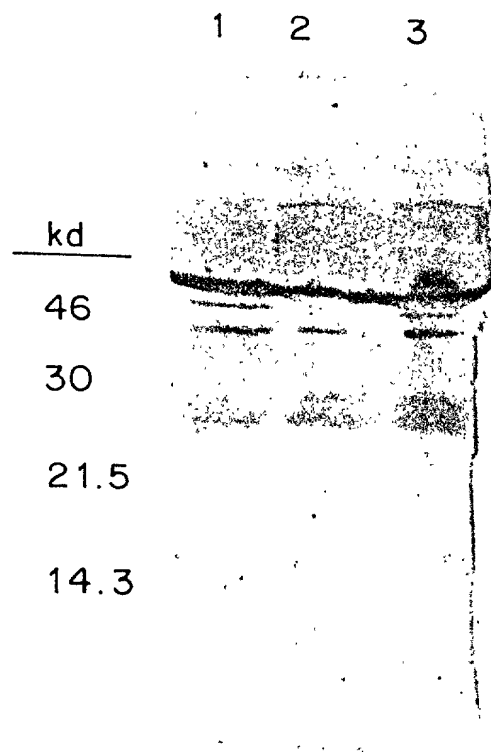


FIG. 15D

10067648.020502

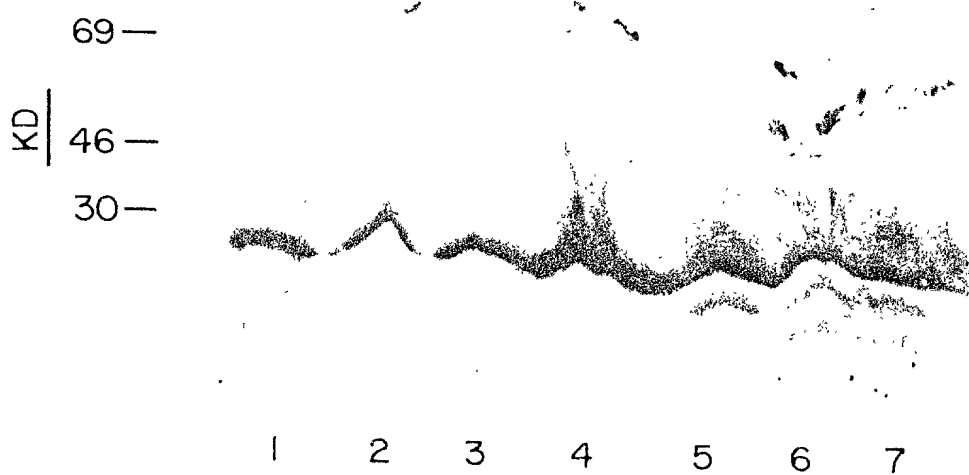
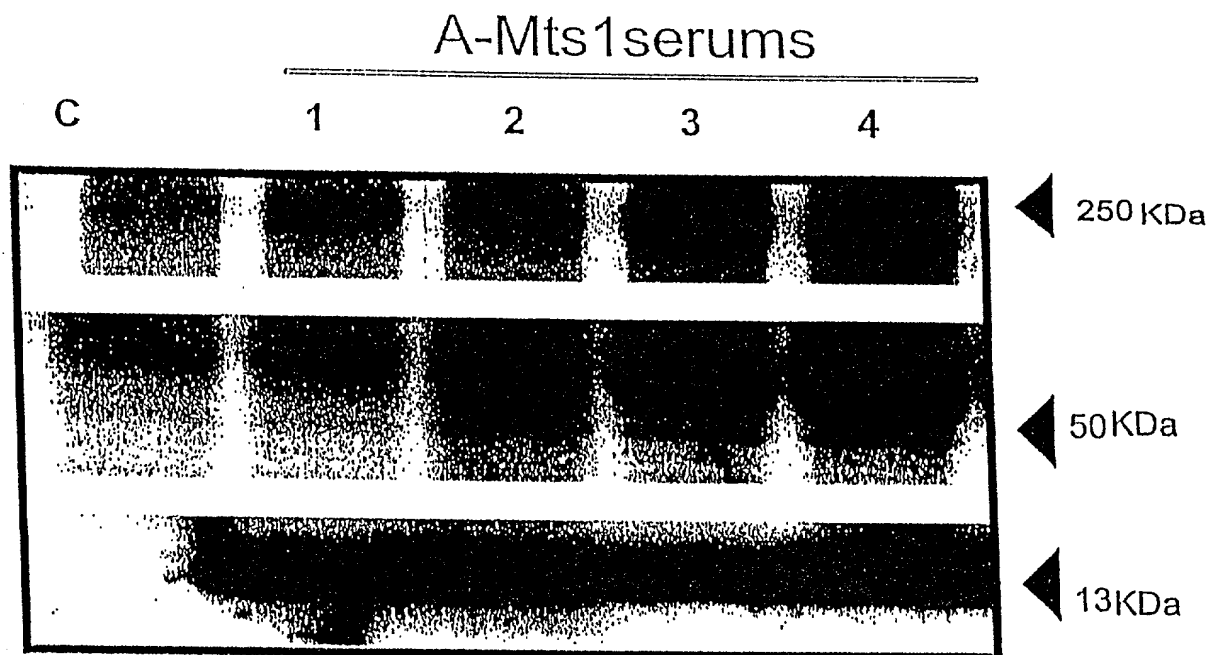


FIG. 16

Immunoprecipitation of ^{35}S -labeled cell lysates.



A-p53

A-Mts1

+	-	+	+
+	-	-	-

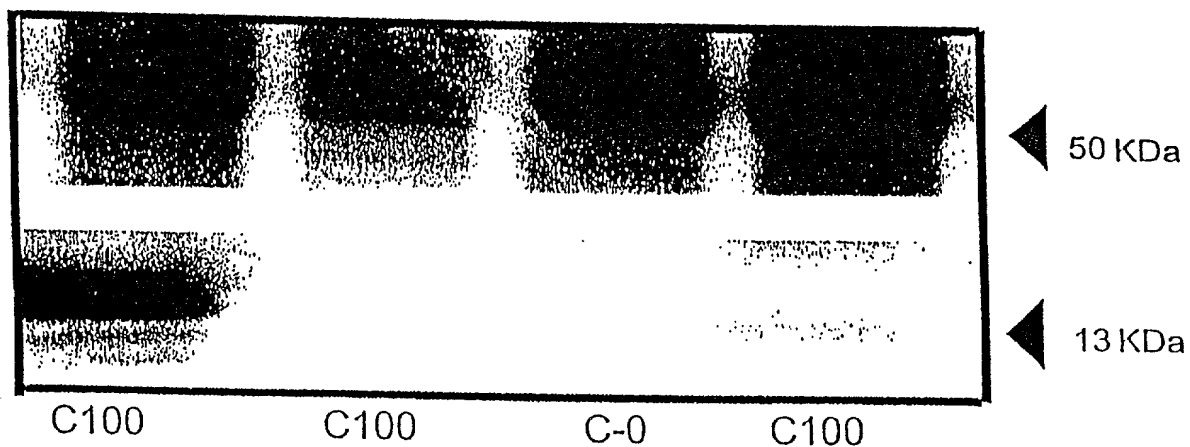
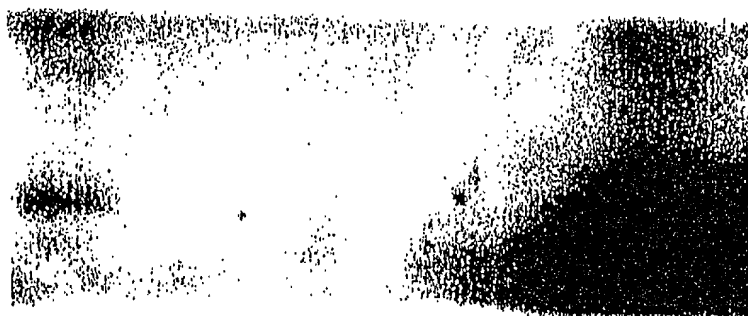


FIG. 17

Immunoprecipitation of non-labeled Mts1 from
CSML-100 cells using anti-p53 antibodies,
directed to various epitops

1 2 3 4 5 6



1. pE19
2. pAb240
3. pAb122
4. pAb421
5. control serum
6. Anti-Mts1 antibody

FIG. 18

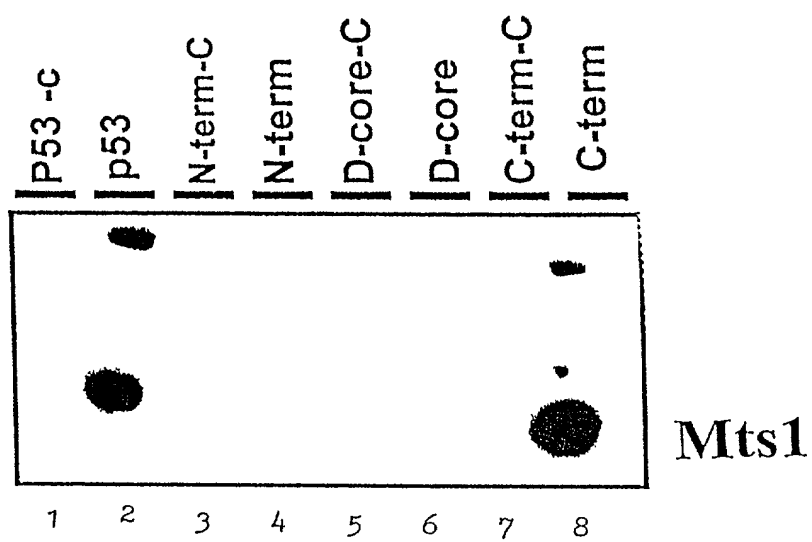


FIG. 19

205020-61925001



FIG. 20

Blot-overlay of p53 and its domains with the Mts1.

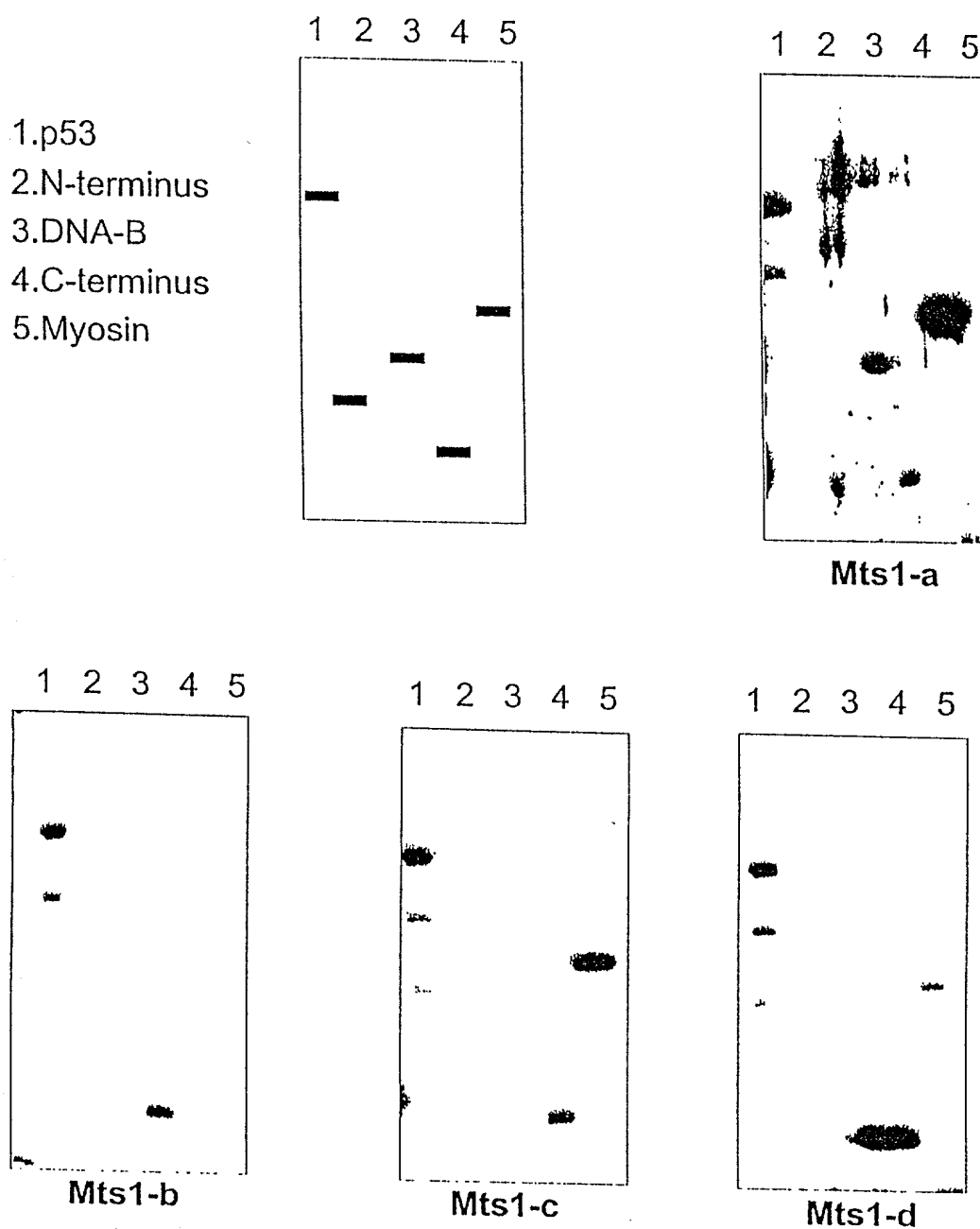
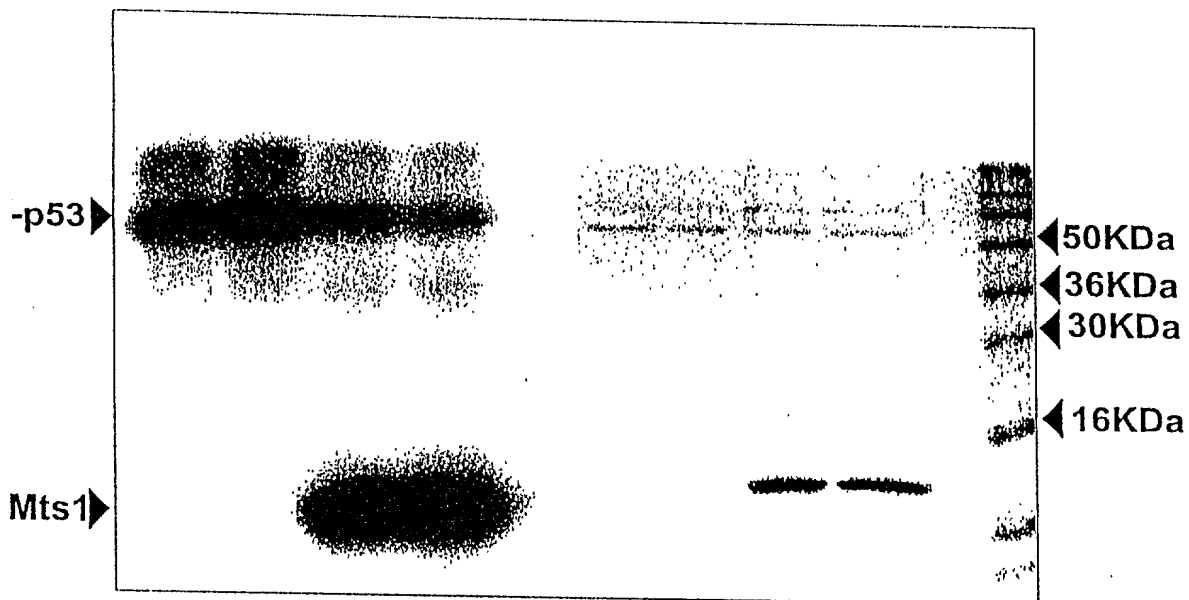


FIG. 21

Phosphorylation of p53 and its domains by PKC.



Domains

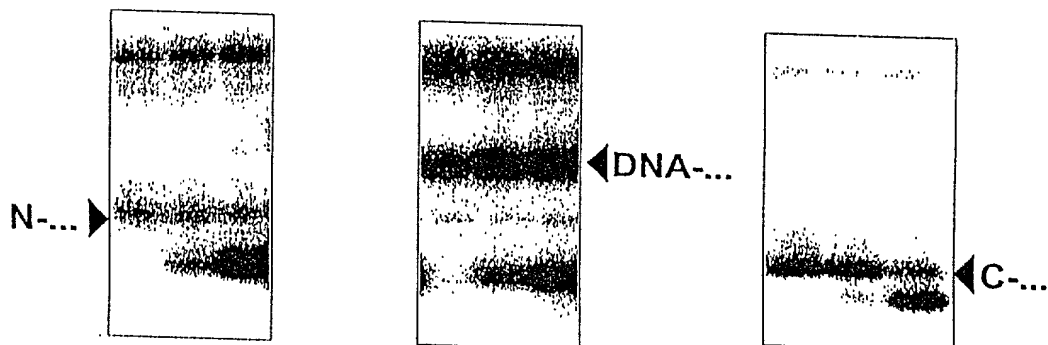


FIG. 22

CKII phosphorylation of p53

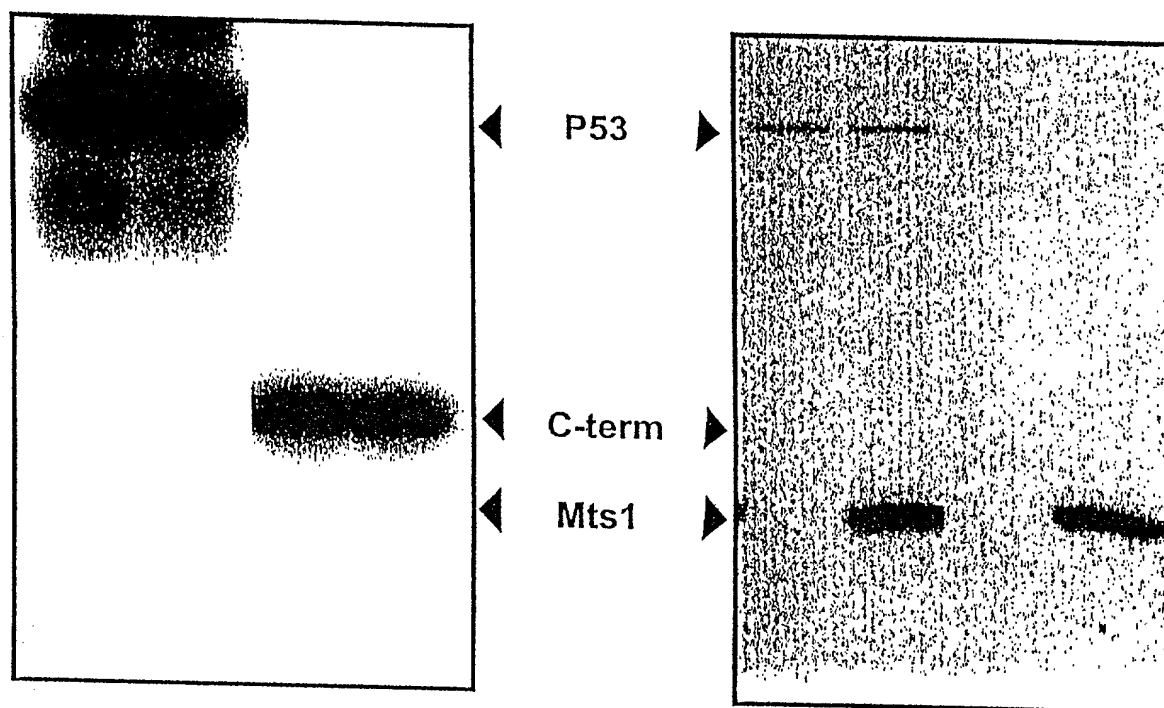


FIG. 23

EMSA using CSML-0 nuclear extracts with
p53 binding site from p21/WAF1 promoter

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Specific competitor	-	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
Non-specific	-	-	-	-	-	+	-	-	-	-	-	-	-	+	+	+
Mts1	-	-	-	-	-	-	-	+	+	+	+	+	+	-	+	-
p Ab421	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+

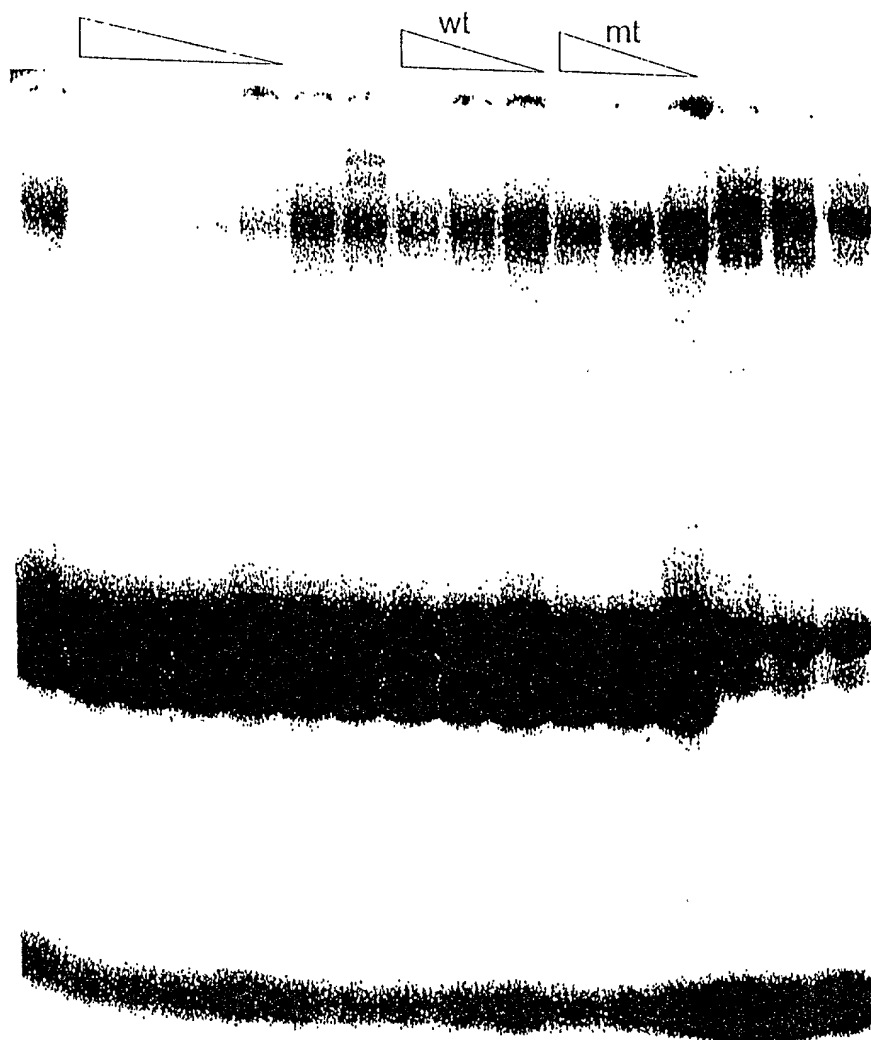


FIG. 24

Relative transactivation of the p21/waf1-reporter gene by p53
in CSML-0 cells

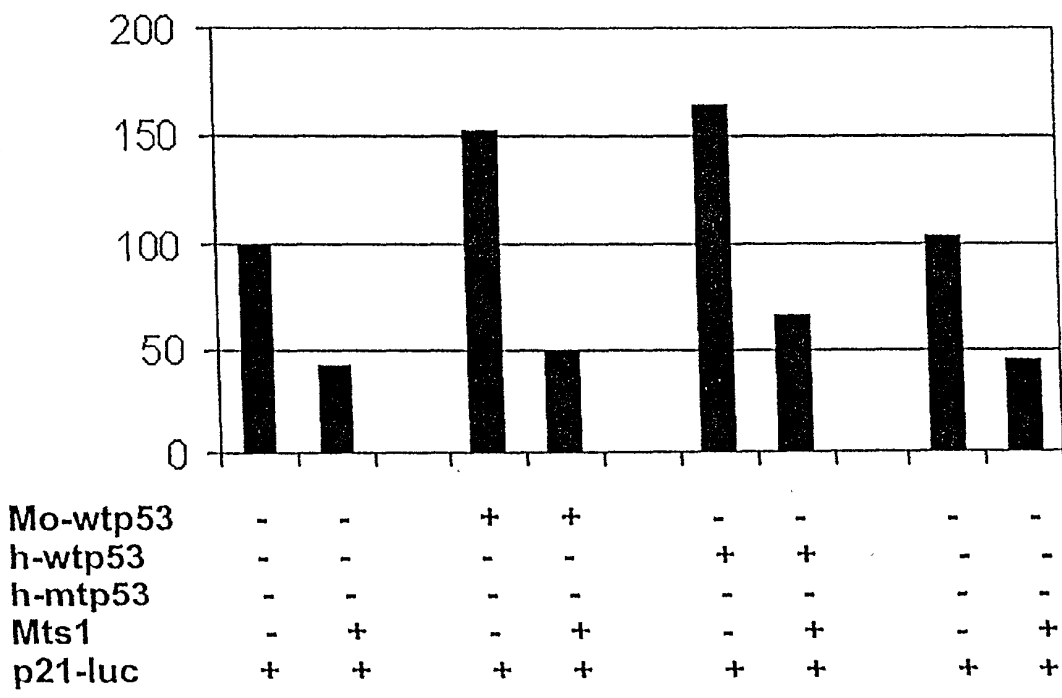


FIG. 25A

Relative transactivation of p53 -responsive reporter in Saos-2 cells

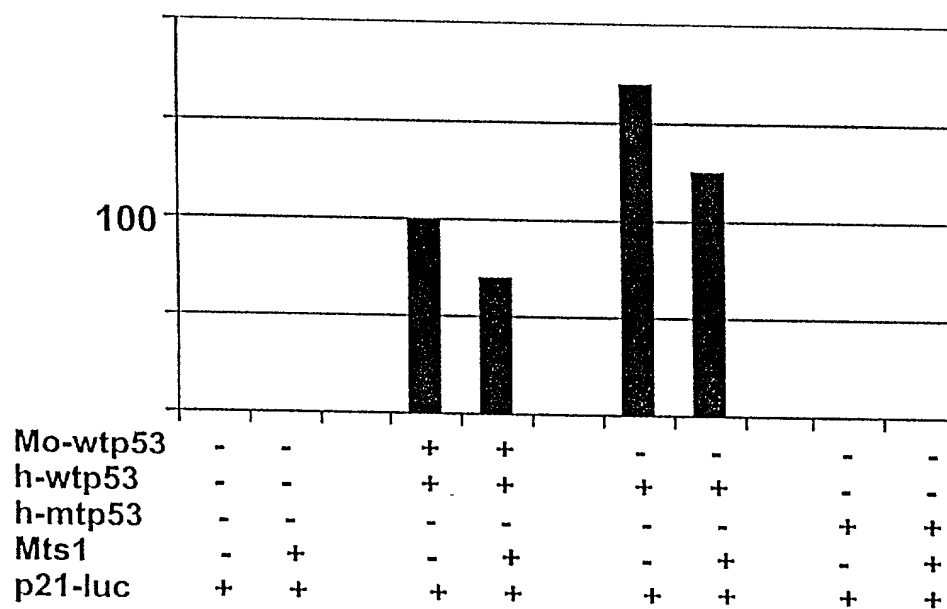


FIG. 25B

Anti-Mts1 antibody enhances tumor necrosis
and throw down metastasis.
CSML-100

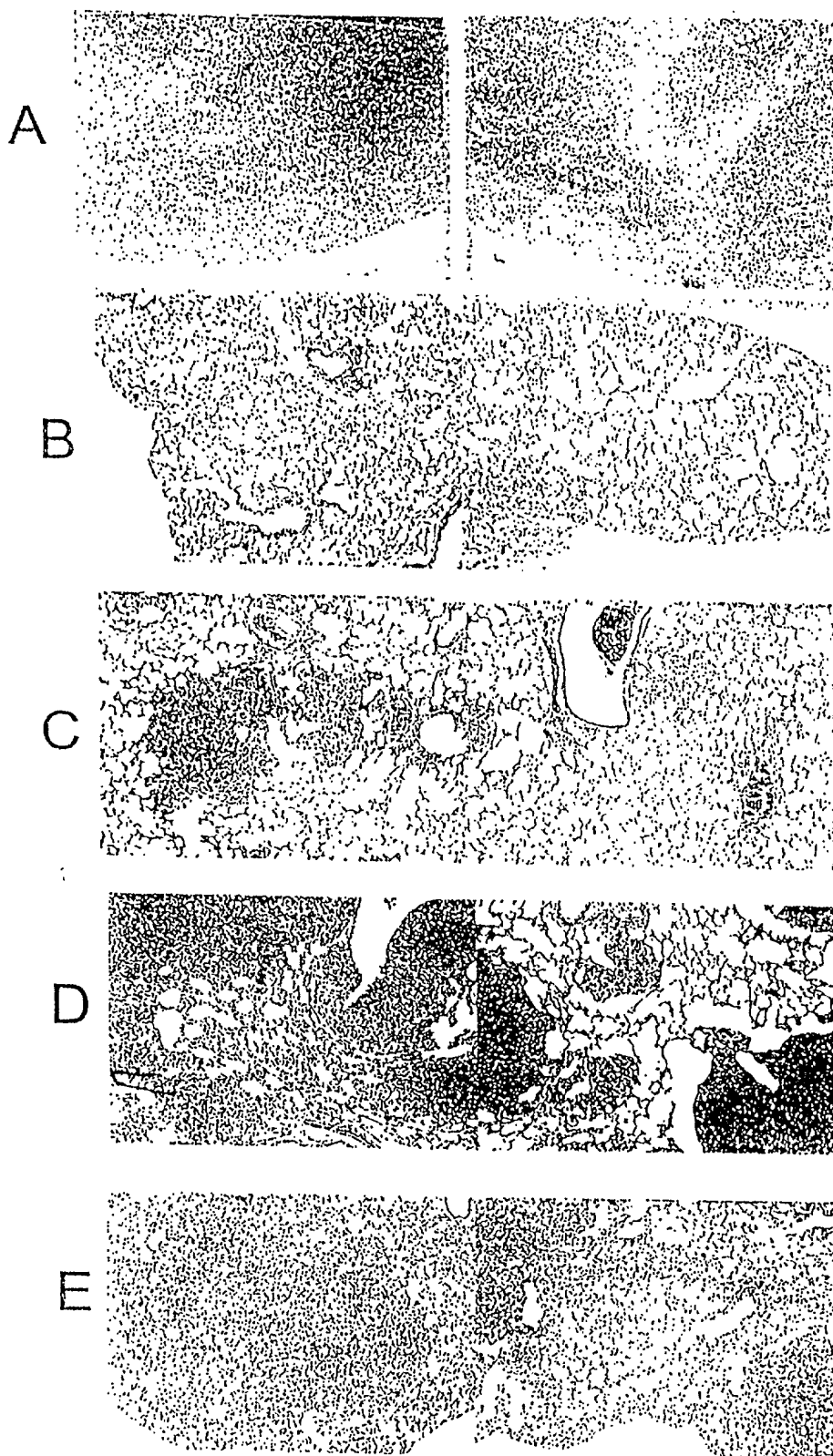


FIG. 26